

CLAIMS

I claim:

1 1. An audio/video system, comprising:
2 a local area network having a data network, a control bus, and a plurality of
3 nodes;
4 a plurality of audio/video appliances each having available audio/video
5 presentations, said audio/video appliances respectively operatively connected to said plural
6 nodes for transmitting information about the available audio/video presentations to said local
7 area network;
8 at least one audio/video output unit for outputting audio/video signals;
9 a control unit having a control program and a memory which stores the
10 information about the audio/video presentations transmitted by said audio/video appliances;
11 an operating unit connected to said control unit; and
12 a visual output unit operatively arranged for displaying the information about the
13 available audio/video presentations independently of the audio/video appliances and dividing
14 the information into classes.

1 2. The audio/video system of claim 1, wherein each class includes at least one
2 subclass and wherein said audio/visual output unit displays the classes, the subclasses for a
3 selected class and names for ones of said audio/video presentations in a selected class and
4 subclass.

1 3. The audio/video system of claim 1, wherein said operating unit comprises
2 means for selecting a selected one of the available audio/video presentations independently of
3 the appliances and means for automatically retrieving the selected one of the available
4 audio/video presentations using said control unit.

1 4. The audio/video system of claim 1, wherein said at least one audio/video
2 output unit further comprising a plurality of audio/video output units for outputting audio/video
3 signals.

1 5. The audio/video system of claim 4, wherein said operating unit comprises
2 means for selecting one of said plural audio/visual output units.

1 6. The audio/video system of claim 1, further comprising a plurality of
2 operating units connected to said control unit.

1 7. The audio/video system of claim 6, wherein each of said plural operating
2 units is assigned a priority.

1 8. The audio/video system of claim 7, wherein a selection made using one of
2 said plural operating units having a relatively high priority is prevented from being modified
3 by another operating unit having a lower priority.

1 9. The audio/video system of claim 3, wherein said control unit is operatively
2 arranged for assigning a priority to each of said plural audio/video appliances.

1 10. The audio/video system of claim 9, wherein at least two of said plural
2 audio/video appliances have the selected one of the available audio/video presentations and said
3 control unit comprises means for connecting the one of said at least two of said plural
4 audio/video appliances having the highest priority to said at least one audio/video output unit.

1 11. The audio/video system of claim 3, wherein said control unit comprises
2 means for reducing a volume when the selected one of the available audio/video presentations
3 is changed.

1 12. The audio/video system of claim 1, wherein said operating unit comprises a
2 start playback function, a stop playback function and a change volume function.

1 13. The audio/video system of claim 1, wherein said local area network
2 comprises an optical ring network.

1 14. The audio/video system of claim 1, wherein said audio/video system is in a
2 motor vehicle.

1 15. The audio/video system of claim 14, wherein at least one of said plural
2 audio/video appliances is operatively arranged for reading map data for a navigation system.

1 16. The audio/video system of claim 1, wherein said audio/video system
2 comprises a home multimedia system.

1 17. The audio/video system of claim 1, wherein one of said classes comprises
2 radio and TV stations.

1 18. The audio/video system of claim 1, wherein one of said classes comprises a
2 type of audio/video presentations.

1 19. The audio/video system of claim 1, wherein one of said classes comprises
2 music titles.

1 20. The audio/video system of claim 1, wherein one of said classes is for
2 information which is not continuously available.

1 21. The audio/video system of claim 1, wherein an audio/video presentation is
2 assigned to a plurality of classifications.

1 22. The audio/video system of claim 1, wherein said local area network
2 comprises an open system.

1 23. The audio/video system of claim 1, wherein wherein said control unit
2 comprises virtual interfaces for each of said plural audio/video appliances.

1 24. The audio/video system of claim 1, wherein said control program
2 comprises a plurality of service modules.

1 25. The audio/video system of claim 24, wherein said plural service modules
2 comprise:
3 a first service module for selecting a suitable audio/video appliance for playing
4 back the selected audio/video presentation;
5 a second service module for selecting and managing said at least one output unit;
6 a third service module for connecting the network's node addresses stipulated by
7 the selections of the first and second service modules; and
8 a fourth service module which requests the functions of said first, second, and
9 third service modules.

1 26. The audio/video system of claim 1, wherein said control program
2 comprises a registration module for registering newly connected audio/video appliances.

1 27. A method for operating a local multimedia system having a plurality of
2 audio/video appliances, including the steps of:

3 (a) transmitting information about available audio/video presentations from
4 the audio/video appliances to a control unit, the information including one or more
5 classifications of the audio/video presentations;

6 (b) processing the information about the available audio/video presentations
7 into classes using the classifications independently of the appliances;

8 (c) outputting the information about the available audio/video presentations
9 which has been processed into classes independently of the appliances onto a visual output unit;

- 10 (d) selecting an audio/video appliance which is suitable for playing back a
11 selected audio/video presentation;
- 12 (e) connecting the selected audio/video appliance to an output unit; and
13 (f) playing back the selected audio/video presentation via the output unit.

1 28. The method of claim 27, wherein said step (a) comprises transmitting a
2 classification, a subclass and a name by the audio/video appliances as information about the
3 available audio/video presentation.

1 29. The method of claim 27, wherein said step (e) comprises selecting a
2 selected audio/video output unit from a plurality of available audio video output units using the
3 operating unit and connecting the selected audio/video output unit to the audio/video appliance
4 selected in said step (d) by the control unit.

1 30. The method of claim 27, further comprising the step of assigning a priority
2 to each of the operating units, and modifying a selection made using a first operating unit with
3 a first priority only if it is done using an operating unit with the same or higher priority.

1 31. The method of claim 27, further comprising the step of assigning priorities
2 to the audio/video appliances and said step (d) comprises selecting, by the control unit, the
3 audio/video appliance with the selected audio/video presentation and which has the highest
4 priority.

1 32. The method of claim 27, further comprising the steps of changing the
2 currently selected audio/visual presentation using the operating unit;
3 selecting, by the control unit, the audio/video appliance which is suitable for
4 playing back the newly selected audio/video presentation;
5 reducing the volume of the audio output unit from an original;
6 connecting the newly selected audio/video appliance to the audio output unit;
7 outputting the newly selected audio/video presentation via the audio output unit;
8 and
9 returning the volume back to the original level.

1 33. The method of claim 27, wherein said step (a) comprises transmitting the
2 information in an optical local area network.

1 34. The method of claim 27, wherein the classifications include a classification
2 for radio and TV stations, a classification for the type of audio and/or video presentation
3 available, a classification for music titles, and a classification for information which is not
4 continuously available.

1 35. The method of claim 34, wherein said step (a) comprises transmitting the
2 information about an available audio/video presentation including more than one classification,
3 and allocating the audio/video presentation to more than one class on the basis of the more than
4 one classifications.

1 36. The method of claim 27, wherein the number of classes in said step (b) is
2 expandable.

1 37. The method of claim 27, further comprising the step of connecting the
2 audio/video appliances and the control unit by virtual interfaces before said step (a).

1 38. The method of claim 27, wherein said step (a) comprises transmitting the
2 information to the control unit which includes a control program having a plurality of service
3 modules.

1 39. The method of claim 38, wherein said step (d) comprises selecting a
2 suitable audio/video appliance for playing back the selected audio/video presentation by a first
3 service module of the control program.

1 40. The method of claim 39, wherein wherein said step (e) comprises selecting
2 the output unit managing the output unit by a second service module.

1 41. The method of claim 40, further comprising the step of connecting the
2 audio/video appliance selected by the first service module and the output unit selected by the
3 second service module by a third service module.

1 42. The method of claim 41, further comprising the step of requesting services
2 of the first, second, and third service modules by a fourth service module.

- 1 43. The method of claim 27, further comprising the step of automatically
- 2 registering a newly introduced audio/video appliance newly introduced into the multimedia
- 3 system in a registration module.